

A little inconsistency or uncertainty is also to be noticed in the matter of the nomenclature of orders. We have *Polemoniaceæ* and *Gentianeæ*, *Rutaceæ* and *Cactæ*, *Scrophulariaceæ* and *Scrophularinæ*, etc. In the existing confusion in such names we should have some standard and a work from the hands of such eminent botanists should be consistent with itself. This is not meant as a censorious criticism upon a work meriting so much praise, but as a plea for botanists who, like the writer, are often bewildered in this maze of terminations.—J. M. C.

REVISION OF THE NORTH AMERICAN LILIACEÆ, by Sereno Watson.—Botanists will be delighted at the appearance of this paper, for if any branch of phænogamic botany needs revision it is the Monocotyledons. We have so many works starting out with noble promise, but stopping before the end is reached and hence the Monocotyledons have been neglected. The work now done helps to fill this gap, and botanists should be congratulated that it has fallen into such competent hands. The order *Liliaceæ*, as now accepted, presents such a diversity of characters that it is very difficult to group the genera according to their affinities. The genera have here been grouped in a manner that is entirely new, and, with a few exceptions, it works like a charm. Baccate fruit as distinguished from capsular is considered a subordinate character, and a division into three suborders or series has been made, based upon other characters. The first series is distinguished by "scarious floral bracts, persistent nerved perianth, perigynous stamens with introrse anthers, an undivided persistent style, and a loculicidal fruit (if capsular.) Both of the other divisions have the stamens hypogynous or nearly so, with more or less extrorse anthers, and the floral bracts are more or less foliaceous or are wanting. Both also always have distinct perianth—segments and unjointed pedicels. But one has a nerveless deciduous perianth, the styles (when present) more or less united, and the fruit a loculicidal capsule or berry. The other division has distinct styles and a septicidal capsule conjoined with a persistent nerved perianth." The subdivision into tribes is based on the characters of the inflorescence mainly. The first series contains 9 tribes and 25 genera; the second, 3 tribes and 13 genera; the third, 4 tribes and 12 genera; making in all 16 tribes and 50 genera. In glancing through the paper we made the following notes: *Allium* is the largest genus, containing 46 species, 18 of which are new. For *Hesperoscordium* (?) *maritimum* of Torrey is made a new genus, *Mulla* by name. Wood's *Brevoortia* is

restored and the species becomes *B. coccinea*. *Hesperanthes* is raised from a subgenus of the African *Anthericum* to generic rank and contains one species, *H. Torreyi*. *Hastingsia* is the name of a new genus, separated from *Schomalivion* to include *S. album*, Durand. *Polygonatum latifolium* is ruled out as not being found in this country. In *Smilacina*, *Maianthium* has been raised to generic rank and *S. bifolia*, var. *Canadensis* becomes *M. Canadensis*. The representatives of the genus *Beaucarnea* and many of the genus *Dasylirion* are included under *Nolina*. *Lilium Grayi* is added to our flora from the Peaks of Otter. The genus *Calochortus* stands second in the number of its species, containing 32. A new genus, called *Oakesia*, is made to contain *Uvularia sessilifolia* and *U. puberula*. *U. flava*, Smith, cannot be distinguished from *U. grandiflora*, and hence is dropped from the specific rank. The varieties *album* and *declinatum* of *Trillium erectum* are also dropped and all included under the description of *Trillium erectum*.

The entire order of *Liliaceæ*, throughout the world, contains 180 genera and 1900 species; 50 genera with 235 species are found in the United States and northward. Mexico adds 4 genera and 40 species, and South America, 26 genera and 58 species. Hence in all America we have 80 genera and 333 species. *Allium*, the largest and most widely distributed genus, contains 270 species.

EXPERIMENTS ON THE NUTRITION OF *DROSER A ROTUNDIFOLIA*—In the Journal of the Linnean Society for July, Francis Darwin publishes a paper under the above title. The experiments are given in detail and were of the same careful and laborious nature as those of his father. He sums up in a few words the conclusions that would seem to follow: "It would seem that the great advantage accruing to carnivorous plants from a supply of nitrogenous food to the leaves is the power of producing a vastly superior yield of seeds. This will no doubt partly explain the fact which has been a stumbling-block to many, that insectivorous plants seem to thrive without animal food; although, as I have shown, the fed plants are in reality and markedly superior in general appearance. I venture to think that the above experiments prove beyond question that the supply of meat to *Drosera* is of signal advantage to the plants. There can be no doubt that both *Drosera* and other insectivorous plants profit in an analogous manner from the capture of insects in a state of nature.

CYPRIPEDIUM WITH A SECOND LABELLUM—A short time since a specimen of *Cypripedium barbatum* was brought into the Laboratory of the